

SCK•CEN Academy

Initiatives for scholars and their teachers

For final-year pupils in secondary education, we organise scientific tours in the unique laboratories and nuclear facilities of our research centre. We also provide training for science teachers and provide educational materials via our website for youngsters:
<http://highschools.sckcen.be>.



Visit SCK•CEN with your class!

Have you ever wondered what a nuclear reactor looks like? And what about the disposal of radioactive waste: do we have any solutions to this problem? Ionising radiation can cure people, but also make them ill: how does that work exactly?

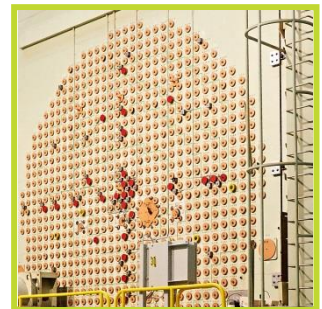
You will find answers to these questions and more when you visit the Belgian Nuclear Research Centre in Mol.



The themes

Four generations of nuclear reactors

Following an introduction about the origins of radioactivity, you will be given a historic overview of the evolution in reactor technology. You will visit the first nuclear research reactor in Belgium (BR1), receive information about electricity production by reactors such as those in Doel and Tihange and you will end the visit by looking at the future fourth generation: MYRRHA is a research reactor that will work even more safely and produce less long-term waste.



Research into disposal of radioactive waste

During this thematic visit you will learn about the excavation techniques in clay and the research into the packaging and disposal of the various categories of radioactive waste. You will descend to 225 meters below ground level, where the HADES research laboratory is located. A unique experience!



Reactor technology: from theory to practice

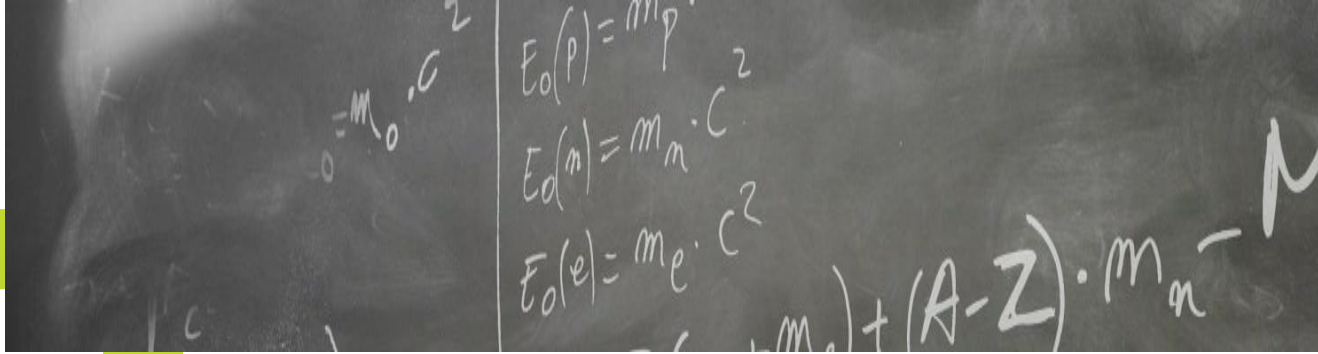
This thematic visit is a must for those studying technical subjects! You will follow the various steps involved in taking a scientific idea through to the practical situation. You will visit our "technology hall", where you can view different experimental set-ups that are needed to build a large facility. You will learn more about corrosion research, ultrasonic visualisation, the chemical behaviour of liquid lead-bismuth, etc.



Impact of radioactivity on humans and the environment

The study of the effects of radioactivity is highly varied. You will learn about radiation sensitivity, the biological effects of ionising radiation and microbial resistance. In addition to research on earth, SCK•CEN is also very active in space: we zoom in on the health effects of space travel; on oxygen, drinking water and food production using bacteria in space; and on microbial contamination of space capsules. You will visit the laboratories for molecular and cellular biology.





Practical

A visit is free of charge and lasts half a day or a full day, with one theme per half day. Our guides are scientists from SCK•CEN and they conduct tours in Dutch, French or English. The dates are set in advance, usually every third Tuesday of the month. More practical information is available on the SCK•CEN website for youngsters.

Applying for a visit

You can apply for a visit via the online application form on the website. Each visit application must be submitted at least one month in advance. We will contact the applicant to confirm the visit and the programme. If you are visiting with more than 17 people, the group will be split up.

Support for science teachers

The SCK•CEN Academy for Nuclear Science and Technology offers support to science teachers by providing educational materials and contributing to educational workshops for teachers, for example those organised by the teachers' associations.

We also organise Teachers Days at our site in Mol, centred around various socially relevant themes in which radioactivity plays a role. These are interactive dialogue sessions with the SCK•CEN scientists about the applications of radioactivity and the status of nuclear research. The theory is linked to the practical situation: during each open day we will offer a scientific visit to one of our nuclear facilities or laboratories. Our website provides more information and the calendar of activities.

<http://highschools.sckcen.be>



A fun, educational excursion!

Dardy Hamburger, Leeuwarder Lyceum Leeuwarden

A fun and illustrative experience in an unexpected location.

Igor Maes, Koninklijk Atheneum, Berchem

You cannot compare school to what you see here and the accompanying explanation.

Gerald Lemmens, WICO campus TIO, Overpelt

Interesting to give direction to your study choice.

Christina Bossens, Atheneum Het Spoor, Mol

Do you want to know more?
<http://highschools.sckcen.be>



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